



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,580	12/20/2001	Jason F. Hunzinger	09752-147001	4973
27572	7590	05/03/2006	EXAMINER	
HARNESSE, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			FERGUSON, KEITH	
			ART UNIT	PAPER NUMBER
			2617	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/029,580	Applicant(s) HUNZINGER, JASON F.	
	Examiner Keith T. Ferguson	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 and 30-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 21-30 and 52-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2617

DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Response to Amendment

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4,10,21-24,30 and 52-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fattouche in view of Watanabe, newly recited reference.

Regarding claims 1,2,10,21,22,30,52-54, and 55-57, Fattouche discloses a method (fig. 10) tracking earliest pilot phase offsets for geo-location determination (col. 34 line 25 through col. 35 line 22) comprising: determining with a cellular telephone (CT), search window limitations for one or more base station sectors (base station pilots) (col. 34 line 25 through col. 35 line 22); and searching for earliest pilot phase offsets

Art Unit: 2617

of the sectors using the determined search window (col. 34 line 25 through col. 35 line 22). Fattouche further discloses using results of phase measurement in position location algorithms (TOA or TDOA) (abstract and col. 34 line 25 through col. 35 line 22), and one or more base stations (201), serving a cell divided into one or more sectors (fig. 2). Fattouche differs from claims 1 and 21 of the present invention in that it does not disclose determining a search window limitations for one or more sectors due to mobile station dynamics. Watanabe teaches a system wherein a mobile station sets a search time for a search for each base station base upon the speed of the mobile station (col. 1 lines 57-67 and col. 6 lines 11-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made To modify Fattouche with determining a search window limitations for one or more sectors due to mobile station dynamics in order the system to allow the receiver to perform a high speed search based upon its speed when determining its position close to a nearby base station which is best for the receiver to communicate with, as taught by Watanabe.

Regarding claims 3,4,23 and 24, Fattouche discloses speed base factor (col. 31 lines 33-47).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2617

6. Claims 5-7 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fattouche in view of Watanabe as applied to claims 1 and 21 above and in further view of Kim et al..

Regarding claims 5 and 25, the combination of Fattouche and Watanabe differs from claims 5 and 25 of the present invention in that they do not disclose setting the search window size asymmetrically from an early and a late side. Kim et al. teaches a tracking circuit within a mobile telephone for setting the search window size asymmetrically from an early and a late side for tracking a received communication signal (col. 1 lines 6-12, col. 2 lines 15-35 and fig. 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify combination of Fattouche and Watanabe with setting the search window size asymmetrically from an early and a late side in order for the wireless system to provide signals to the cellular telephone so that the cellular telephone can determine its position, as taught by Kim et al..

Regarding claims 6,7,26 and 27, combination of Fattouche and Watanabe differs from claims 6,7,26 and 27 of the present invention in that they do not disclose setting an early side of the search window based on cell size and speed of a mobile station and setting a later side of the search window based on a speed of a mobile station. Kim et al. teaches system wherein a tracking circuit within a mobile telephone for setting the search window size asymmetrically from an early and a late side for tracking a received communication signal (col. 1 lines 6-12, col. 2 lines 15-35 and fig. 4), setting an early side of the search window based on cell size (signal to noise ratio by M) and speed (velocity) of a mobile station (M) (col. 3 lines 14-56 and col. 5 line 54 through col. 6 line 63), and setting a later side of the search window based on a speed (velocity) of a mobile station) (col. 3 lines 14-56 and col. 5 line 54 through col. 6 line 63). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify combination of Fattouche and Watanabe with setting an early side of the search window based on cell size and speed of a mobile station and setting a later side of the search window based on a speed of a mobile station in order for the system to communicate with the cellular telephone and for the cellular telephone to determine its location base on the speed of the

Art Unit: 2617

cellular telephone and the time of arrival of pilot offsets of nearby base station, as taught by Kim et al..

7. Claims 8,9,28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fattouche in view of Watanabe as applied to claims 1 and 21 above and in further view of Leblanc et al..

Regarding claims 8,9,28 and 29, combination of Fattouche and Watanabe differs from claims 8,9,28 and 29 of the present invention in that they do not disclose transmitting cell size based limitations in a overhead to a mobile station. Leblanc et al. teaches transmitting cell size based limitations in a overhead message (delay elements which contain omniscell sizes and radius) to a mobile station (col. 24 lines 54-67 and col. 35 line 11 through col. 36 line 34). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide combination of Fattouche and Watanabe with transmitting cell size based limitations in a overhead to a mobile station in order for the system to provide the cellular telephone nearby base station pilot signals so that the cellular telephone could determine its position, as taught by Leblanc et al..

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (571) 272-7865. The examiner can normally be reached on 6:30am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Keith Ferguson
Art Unit 2617
April 27, 2006

KEITH FERGUSON
PRIMARY EXAMINER

